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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/773,023

**Applicant(s)**

HARADA ET AL.

**Examiner**

MARCUS T. RILEY

**Art Unit**

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 February 2009.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-10 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 04 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date 04/04/2007  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

**Response to Amendment**

1. This office action is responsive to applicant's remarks received on July 21, 2008. Claims 1-10 remain pending.

**Response to Arguments**

2. Applicant's arguments with respect to amended claims 1, 5, 7, 8 & 10 filed on July 21, 2008 have been fully considered but they are not persuasive.

**A: Applicant's Remarks**

For Applicant's Remarks see "*Applicant Arguments/Remarks Made in an Amendment*" filed February 12, 2009.

**A: Applicant's Remarks**

Applicant argues that neither Itano, Kurosawa '324 or Huang teach or suggest a film holder adapted to be put on an original bed of a flat bead image reader that includes "a read area corresponding to frames the number of and length of which are half the number of and half the length of frames of one roll of a strip film."

Examiner understands Applicant's arguments but respectfully disagree. Itano, Kurosawa or Huang either alone or in combination discloses, teaches or suggests the Applicant's claimed invention. Figure 3, #10 and letter "P" of Itano discloses a film holder adapted to be put on an

original bed of a flat bead image reader. #10 is the flatbed image reader and "P" is the film. Examiner also understands that the film of Itano, is not a strip film as required by claim 1. However, Kurosawa at column 4, lines 58-67 thru column 5, lines 1-2 discloses a strip film ("*In this embodiment, the film holder 201a holds a 35 mm film strip 200a containing six frames of images, and the film holder 201b holds a "brownie" type film strip 200b containing three frames of images.*" column 4, lines 58-62). See also ("*On the film holder 201a, a slit 202a to which the film strip 200a is to be inserted extends through in the length (longitudinal) direction thereof.*" column 4, lines 66-67 thru column 5, lines 1-2).

Moreover, Kurosawa at column 4, lines 58-67 thru column 5 lines 1-8 discloses a read area corresponding to frames the number of and length of which are half the number of and half the length of frames of one roll of a strip film (See Figures 1 and 4 wherein the strip film holder 201a of holds a 35 mm film strip 200a containing six frames of images, and the film holder 201b holds a film strip 200b containing three frames of images. On the film holder 201a, six frame windows 203a corresponding to the six images of the film strip 200a are formed, and on the film holder 201b, three frame windows 203b corresponding to the three images of the film strip 203b are formed. "*In this embodiment, the film holder 201a holds a 35 mm film strip 200a containing six frames of images, and the film holder 201b holds a "brownie" type film strip 200b containing three frames of images. The film holders 201a and 201b have the same width and thickness so that either of them can be held by the rail member 105. Further, the length of the film holders 201a and 201b is substantially the same as the length of the table 101. On the film holder 201a, a slit 202a to which the film strip 200a is to be inserted extends through in the length (longitudinal) direction thereof. Similarly, a slit 202b, to which the film strip 200b is to be inserted, extends through in the longitudinal direction of the film holder 201b. On the film holder 201a, six frame windows 203a corresponding to the six images of the film strip 200a are formed, and, on the film holder 201b, three frame windows 203b corresponding to the three images of the film strip 203b are formed. At the leading end portions of the film holders 201a and 201b, the film identifying openings 204a and 204b are formed, respectively. The film identifying openings 204a and 204b are used for identifying a folder (film strip) currently inserted, and therefore, the openings 204a and 204b are different.*" column 4, lines 58-67 thru column 5 lines 1-8).

Therefore, Itano '201 either alone or in combination with and Kurosawa or Huang discloses, teaches or suggests the Applicant's claimed invention. Claims 3 & 6 depend from

claims 1 & 5 respectively. Because claims 1 & 5 are unpatentable, claims 3 & 6 are also unpatentable. As a result, Applicant's application is not in condition for allowance.

**Claim Rejections - 35 USC § 103**

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1, 2, 4, 5 & 7-10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Itano et al. (US 5,835,201 hereinafter, Itano '201) in combination with Kurosawa et al. (US 6,714,324 hereinafter, Kurosawa '324).

**Regarding claim 1;** Itano '201 discloses a film holder for holding a transparency ("*The original holder 10 holds an original P in such a manner that the periphery of the original P is clamped between the lower frame 12 and the upper frame 14 and that the original P is observable through the openings 12W and 14W. The original P used herein is, for example, a 4".times.5" film.*" column 5, lines 18-25).

the film holder being adapted to be put on an original bed of a flatbed image reader ("*A flat bed scanning-type image reading apparatus has a slot for receiving the original holder 10. The slot is provided with a projection member functioning as restriction means, which is engageable with the guide grooves 16 and 18 so as to allow the original holder 10 to be inserted into the slot in either one of the two restricted directions. The projection member interferes with the insertion of the original holder 10 into the slot in the directions other than the two restricted directions.*" column 5, lines 34-42).

which is capable of reading the transparency ("*The flat bed scanner 100 further includes a projection member 120 formed in a slot 102 for receiving and engaging with the first and the second guide grooves 16 and 18 of the*

original holder 10, and a **photo sensor 122 for optically reading discriminative information** of the first discrimination aperture 24 or the second discrimination aperture 26 **of the original holder 10.** " column 6, lines 9-15).

when a first corner of the film which is opposite to the first corner of the original bed which has the same positional relationship as the first corner of the film holder; when a second corner of the film holder which is opposite to the first corner of the film holder in the longitudinal direction is matched with a second corner of the original bed which is opposite to the first corner of the original bed in a lateral direction ("As illustrated in FIGS. 3 and 4, the original holder 10 includes a lower frame 12 and an upper frame 14, which are joined with each other to allow free opening and closing. The lower frame 12 and the upper frame 14 have inner openings 12W and 14W, respectively. **The original holder 10 holds an original P in such a manner that the periphery of the original P is clamped between the lower frame 12 and the upper frame 14 and that the original P is observable through the openings 12W and 14W.** The original P used herein is, for example, a 4".times.5" film." column 5, lines 13-23). See also ("As long as an original P is held at predetermined position and orientation by the **original holder 904, the image obtained by the flat bed scanning-type image reading apparatus 900 always has the same directional property.** When the top and bottom sides of the original P are located along the longitudinal sides of the original holder 904 as shown in FIG. 2(A), for example, the flat bed scanning-type image reading apparatus 900 gives an erecting image as displayed on a CRT 920. When the left and right sides of the original P are located along the longitudinal sides of the original holder 904 as shown in FIG. 2(B). " column 1, lines 32-42). Here, the original P of Itano '201 may be inserted into the flat bed scanner where the first and second corners of the original P may be matched with the first and second corners of the flat bed scanner 10.

Itano '201 does not disclose a strip film holder mechanism for holding the strip film, in a longitudinal direction; on which an original is to be put and a read area corresponding to frames the number of and length of which are half the number of and half the length of frames of one roll of film; a first frame group having one half of the frames of the strip film contained in the

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read area; a second frame group having the other half of the frames of the strip film contained in the read area.

Kurosawa '324 discloses a strip film holder mechanism for holding the strip film, in a longitudinal direction (*"In this embodiment, the film holder 201a holds a 35 mm film strip 200a containing six frames of images, and the film holder 201b holds a "brownie" type film strip 200b containing three frames of images."* column 4, lines 58-62). See also (*"On the film holder 201a, a slit 202a to which the film strip 200a is to be inserted extends through in the length (longitudinal) direction thereof."* column 4, lines 66-67 thru column 5, lines 1-2).

on which an original is to be put and a read area corresponding to frames the number of and length of which are half the number of and half the length of frames of one roll of film; a first frame group having one half of the frames of the strip film contained in the read area; a second frame group having the other half of the frames of the strip film contained in the read area (See Figures 1 and 4 wherein the strip film holder 201a of holds a 35 mm film strip 200a containing six frames of images, and the film holder 201b holds a film strip 200b containing three frames of images. On the film holder 201a, six frame windows 203a corresponding to the six images of the film strip 200a are formed, and on the film holder 201b, three frame windows 203b corresponding to the three images of the film strip 200b are formed. *"In this embodiment, the film holder 201a holds a 35 mm film strip 200a containing six frames of images, and the film holder 201b holds a "brownie" type film strip 200b containing three frames of images. The film holders 201a and 201b have the same width and thickness so that either of them can be held by the rail member 105. Further, the length of the film holders 201a and 201b is substantially the same as the length of the table 101. On the film holder 201a, a slit 202a to which the film strip 200a is to be inserted extends through in the length (longitudinal) direction thereof. Similarly, a slit 202b, to which the film strip 200b is to be inserted, extends through in the longitudinal direction of the film holder 201b. On the film holder 201a, six frame windows 203a corresponding to the six images of the film strip 200a are formed, and, on the film holder 201b, three frame windows 203b corresponding to the three images of the film strip 200b are formed. At the leading end portions of the film holders 201a and 201b, the film identifying openings 204a and 204b are formed, respectively. The film identifying openings 204a and 204b are used for identifying a folder (film strip) currently inserted, and therefore, the openings 204a and 204b are different."* column 4, lines 58-67 thru column 5 lines 1-8).

Itano '201 and Kurosawa '324 are combinable because they are from the same field of endeavor of scanners (*"The present invention relates to a film scanner for scanning images..."* Kurosawa '324 at column 1, lines 6-7).



At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the flatbed scanner as taught by Itano '201 by adding a strip film holder mechanism for holding the strip film, in a longitudinal direction; on which an original is to be put and a read area corresponding to frames the number of and length of which are half the number of and half the length of frames of one roll of film; a first frame group having one half of the frames of the strip film contained in the read area; a second frame group having the other half of the frames of the strip film contained in the read area as taught by Kurosawa '324. The motivation for doing so would have been to provide an improved film scanner where the scanning condition is automatically adjusted (*"It is therefore an object of the invention to provide an improved film scanner in which, when films to be scanned are exchanged, the scanning condition is automatically adjusted."* Kurosawa '324 at column 2, lines 5-9). Therefore, it would have been obvious to combine Itano '201 with Kurosawa '324 to obtain the invention as specified in claim 1.

**Regarding claim 2;** Itano '201 discloses a pair of guide parts between the first and second corners of the film holder; wherein one of the guide parts close to the first corner indicates the second frame group and the other of the guide parts close to the second corner indicates the first frame group (*"First and second guide grooves 16 and 18 functioning as corresponding engagement means are formed on a rear face of the lower frame 12 of the original holder 10 as clearly seen in FIG. 5."* column 5, lines 28-31). See also (*"The slot is provided with a projection member functioning as restriction means, which is engageable with the guide grooves 16 and 18 so as to allow the original holder 10 to be inserted into the slot in either one of the two restricted directions. The projection member interferes with the insertion of the original holder 10 into the slot in the directions other than the two restricted directions."* column 5, lines 35-39).

**Regarding claim 4;** Itano '201 discloses a guide part between the third and fourth corners of the film holder wherein the guide part indicates frames of the slide film (*"First and second*

*guide grooves 16 and 18 functioning as corresponding engagement means are formed on a rear face of the lower frame 12 of the original holder 10 as clearly seen in FIG. 5.” column 5, lines 28-31). See also (“The slot is provided with a projection member functioning as restriction means, which is engageable with the **guide grooves 16 and 18** so as to **allow the original holder 10 to be inserted into the slot** in either one of the two restricted directions. The projection member interferes with the insertion of the original holder 10 into the slot in the directions other than the two restricted directions.” column 5, lines 35-39).*

**Regarding claim 5;** Itano ‘201 discloses an image reader comprising: a flatbed image reader main unit including an original bed (“*A flat bed scanning-type image reading apparatus has a slot for receiving the original holder 10. The slot is provided with a projection member functioning as restriction means, which is engageable with the guide grooves 16 and 18 so as to allow the original holder 10 to be inserted into the slot in either one of the two restricted directions. The projection member interferes with the insertion of the original holder 10 into the slot in the directions other than the two restricted directions.*” column 5, lines 34-35).

a film holder for holding the transparency adapted to be placed on the original bed (“*A transparent original, such as a film, is held between the lower frame and the upper frame. The conventional original holder generally has an oblong shape and is inserted in a specified direction into the slot 902 of the flat bed scanning-type image reading apparatus 900.*” column 1, lines 27-31); See also (“*A flat bed scanning-type image reading apparatus has a slot for receiving the original holder 10. The slot is provided with a projection member functioning as restriction means, which is engageable with the guide grooves 16 and 18 so as to allow the original holder 10 to be inserted into the slot in either one of the two restricted directions. The projection member interferes with the insertion of the original holder 10 into the slot in the directions other than the two restricted directions.*” column 5, lines 34-42).

and capable of reading a transparency (“*The flat bed scanner 100 further includes a projection member 120 formed in a slot 102 for receiving and engaging with the first and the second guide grooves 16 and 18 of the original holder 10, and a photo sensor 122 for optically reading discriminative information of the first discrimination aperture 24 or the second discrimination aperture 26 of the original holder 10.*” column 6, lines 9-15).

where a first corner of the film holder is matched with a first corner of the original bed which has the same positional relationship as the first corner of the film holder, when a second corner of the film holder which is opposite to the first corner of the film holder in the longitudinal direction is matched with a second corner of the original bed which is opposite to the first corner of the original bed in a lateral direction (*"As illustrated in FIGS. 3 and 4, the original holder 10 includes a lower frame 12 and an upper frame 14, which are joined with each other to allow free opening and closing. The lower frame 12 and the upper frame 14 have inner openings 12W and 14W, respectively. The original holder 10 holds an original P in such a manner that the periphery of the original P is clamped between the lower frame 12 and the upper frame 14 and that the original P is observable through the openings 12W and 14W. The original P used herein is, for example, a 4".times.5" film."* column 5, lines 13-23). **See also** (*"As long as an original P is held at predetermined position and orientation by the original holder 904, the image obtained by the flat bed scanning-type image reading apparatus 900 always has the same directional property. When the top and bottom sides of the original P are located along the longitudinal sides of the original holder 904 as shown in FIG. 2(A), for example, the flat bed scanning-type image reading apparatus 900 gives an erecting image as displayed on a CRT 920. When the left and right sides of the original P are located along the longitudinal sides of the original holder 904 as shown in FIG. 2(B)."* column 1, lines 32-42). Here, the original P of Itano '201 may be inserted into the flat bed scanner where the first and second corners of the original P may be matched with the first and second corners of the flat bed scanner 10.

where the film holder includes a pair of guide parts between first and second corners of the film holder, in which a first of the guide parts close to the first corner indicates the second frame group and a second of the guide parts close to the second corner indicates the first frame group (*"First and second guide grooves 16 and 18 functioning as corresponding engagement means are formed on a rear face of the lower frame 12 of the original holder 10 as clearly seen in FIG. 5."* column 5, lines 28-31). **See also** (*"The slot is provided with a projection member functioning as restriction means, which is engageable with the guide grooves 16 and 18 so as to allow the original holder 10 to be inserted into the slot in either one of the two restricted directions. The projection member*

*interferes with the insertion of the original holder 10 into the slot in the directions other than the two restricted directions.*" column 5, lines 35-39).

and the original bed includes a first guide indication part for indicating the first frame group a position corresponding to the second of the guide parts when the first corner of the film holder is matched with the first corner of the original bed ("***First and second guide grooves 16 and 18 functioning as corresponding engagement means are formed on a rear face of the lower frame 12 of the original holder 10 as clearly seen in FIG. 5.***" column 5, lines 28-31). See also ("*The slot is provided with a projection member functioning as restriction means, which is engageable with the guide grooves 16 and 18 so as to allow the original holder 10 to be inserted into the slot in either one of the two restricted directions. The projection member interferes with the insertion of the original holder 10 into the slot in the directions other than the two restricted directions.*" column 5, lines 35-39).

and a second guide indication part for indicating the second frame group at a position corresponding to the first of the guide parts when the second corner of the film holder is matched with the second corner of the original bed ("***First and second guide grooves 16 and 18 functioning as corresponding engagement means are formed on a rear face of the lower frame 12 of the original holder 10 as clearly seen in FIG. 5.***" column 5, lines 28-31). See also ("*The slot is provided with a projection member functioning as restriction means, which is engageable with the guide grooves 16 and 18 so as to allow the original holder 10 to be inserted into the slot in either one of the two restricted directions. The projection member interferes with the insertion of the original holder 10 into the slot in the directions other than the two restricted directions.*" column 5, lines 35-39).

Itano '201 does not disclose a strip film holder mechanism for holding the strip film in a longitudinal direction; where an original is to be put and a read area corresponding to frames the number of and length of which are half the number of and half the length of frames of one roll of film; a first frame group having one half of the frames of the strip film contained in the read area; a second frame group having frames the other half of the frames of the strip film contained in the read area.

Kurosawa '324 discloses a strip film holder mechanism for holding the strip film, in a longitudinal direction (*"In this embodiment, the film holder 201a holds a 35 mm film strip 200a containing six frames of images, and the film holder 201b holds a "brownie" type film strip 200b containing three frames of images."* column 4, lines 58-62). See also (*"On the film holder 201a, a slit 202a to which the film strip 200a is to be inserted extends through in the length (longitudinal) direction thereof."* column 4, lines 66-67 thru column 5, lines 1-2).

where an original is to be put and a read area corresponding to frames the number of which is half the number of frames of one roll of film ; a first frame group having one half of the frames of the strip film contained in the read area; a second frame group having frames the other half of the frames of the strip film contained in the read area (See Figures 1 and 4 wherein the strip film holder 201a of holds a 35 mm film strip 200a containing six frames of images, and the film holder 201b holds a film strip 200b containing three frames of images. On the film holder 201a, six frame windows 203a corresponding to the six images of the film strip 200a are formed, and on the film holder 201b, three frame windows 203b corresponding to the three images of the film strip 203b are formed. *" In this embodiment, the film holder 201a holds a 35 mm film strip 200a containing six frames of images, and the film holder 201b holds a "brownie" type film strip 200b containing three frames of images. The film holders 201a and 201b have the same width and thickness so that either of them can be held by the rail member 105. Further, the length of the film holders 201a and 201b is substantially the same as the length of the table 101. On the film holder 201a, a slit 202a to which the film strip 200a is to be inserted extends through in the length (longitudinal) direction thereof. Similarly, a slit 202b, to which the film strip 200b is to be inserted, extends through in the longitudinal direction of the film holder 201b. On the film holder 201a, six frame windows 203a corresponding to the six images of the film strip 200a are formed, and, on the film holder 201b, three frame windows 203b corresponding to the three images of the film strip 203b are formed. At the leading end portions of the film holders 201a and 201b, the film identifying openings 204a and 204b are formed, respectively. The film identifying openings 204a and 204b are used for identifying a folder (film strip) currently inserted, and therefore, the openings 204a and 204b are different."* column 4, lines 58-67 thru column 5 lines 1-8).

Itano '201 and Kurosawa '324 are combinable because they are from the same field of endeavor of scanners (*"The present invention relates to a film scanner for scanning images..."* Kurosawa '324 at column 1, lines 6-7).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the flatbed scanner as taught by Itano '201 by adding a strip film holder mechanism for holding the strip film in a longitudinal direction; where an original is to be put and a read area corresponding to frames the number of and length of which are half the number of and half the length of frames of one roll of film; a first frame group having one half of the frames of the strip film contained in the read area; a second frame group having frames the other half of the frames of the strip film contained in the read area as taught by Kurosawa '324. The motivation for doing so would have been to provide an improved film scanner where the scanning condition is automatically adjusted (*"It is therefore an object of the invention to provide an improved film scanner in which, when films to be scanned are exchanged, the scanning condition is automatically adjusted."* Kurosawa '324 at column 2, lines 5-9). Therefore, it would have been obvious to combine Itano '201 with Kurosawa '324 to obtain the invention as specified in claim 5.

**Regarding claim 7;** Itano '201 discloses a film holder for holding a transparency (*"The original holder 10 holds an original P in such a manner that the periphery of the original P is clamped between the lower frame 12 and the upper frame 14 and that the original P is observable through the openings 12W and 14W. The original P used herein is, for example, a 4".times.5" film. The upper frame 14 is made of a transparent acrylic resin, whereas the lower frame 12 is composed of a colored acrylic resin."* column 5, lines 18-25);

the film holder being adapted to be put on an original bed of a flatbed image reader (*"A flat bed scanning-type image reading apparatus has a slot for receiving the original holder 10. The slot is provided with a projection member functioning as restriction means, which is engageable with the guide grooves 16 and 18 so as to allow the original holder 10 to be inserted into the slot in either one of the two restricted directions. The projection member interferes with the insertion of the original holder 10 into the slot in the directions other than the two restricted directions."* column 5, lines 34-42).

capable of reading the a transparency (*"The flat bed scanner 100 further includes a projection member 120 formed in a slot 102 for receiving and engaging with the first and the second guide grooves 16 and 18 of the original holder 10, and a photo sensor 122 for optically reading discriminative information of the first discrimination aperture 24 or the second discrimination aperture 26 of the original holder 10."* column 6, lines 9-15);

when a second corner of the film holder which is opposite to the first corner of the film holder in the longitudinal direction is matched with a second of the original bed which is opposite to the first corner of the original bed in a lateral direction (*"As illustrated in FIGS. 3 and 4, the original holder 10 includes a lower frame 12 and an upper frame 14, which are joined with each other to allow free opening and closing. The lower frame 12 and the upper frame 14 have inner openings 12W and 14W, respectively. The original holder 10 holds an original P in such a manner that the periphery of the original P is clamped between the lower frame 12 and the upper frame 14 and that the original P is observable through the openings 12W and 14W. The original P used herein is, for example, a 4".times.5" film."* column 5, lines 13-23). See also (*"As long as an original P is held at predetermined position and orientation by the original holder 904, the image obtained by the flat bed scanning-type image reading apparatus 900 always has the same directional property. When the top and bottom sides of the original P are located along the longitudinal sides of the original holder 904 as shown in FIG. 2(A), for example, the flat bed scanning-type image reading apparatus 900 gives an erecting image as displayed on a CRT 920. When the left and right sides of the original P are located along the longitudinal sides of the original holder 904 as shown in FIG. 2(B)."* column 1, lines 32-42). Furthermore, see (*"One object of the present invention is thus to allow both a laterally long image and a vertically long image to be promptly displayed as an erecting image without any specific operations but only by inserting an original holder in an appropriate direction into an image reading apparatus."* column 2, lines 33-37); Here, the original P of Itano '201 may be inserted into the flat bed scanner where the first and second corners of the original P may be matched with the first and second corners of the flat bed scanner.

an identification hole being provided in the proximity of the strip film holder mechanism at a position contained in the read area when the first corner of the film holder is matched with the first corner of the original bed, or at a position contained in the read area when the second

corner of the film holder is matched with the second corner of the original bed (*"a discrimination aperture reading unit 185 for activating the photo sensor 122 to read the number of through holes included in either the first discrimination aperture 24 or the second discrimination aperture 26 of the original holder 10."* column 7, lines 1-5). 10.

Itano '201 does not expressly disclose a strip film holder mechanism for holding the strip film in a longitudinal direction; a read area corresponding to frames the number of and length of which are half the number of and half the length of frames of one roll of strip film and can read a transparency; a second frame group having the other half of the frames of the strip film is contained in the read area.

Kurosawa '324 discloses a strip film holder mechanism for holding the strip film in a longitudinal direction (*"In this embodiment, the film holder 201a holds a 35 mm film strip 200a containing six frames of images, and the film holder 201b holds a "brownie" type film strip 200b containing three frames of images."* column 4, lines 58-62). See also (*"On the film holder 201a, a slit 202a to which the film strip 200a is to be inserted extends through in the length (longitudinal) direction thereof."* column 4, lines 66-67 thru column 5, lines 1-2).

a read area corresponding to frames the number of and length of which are half the number of and half the length of frames of one roll of strip film and can read a transparency; a second frame group having the other half of the frames of the strip film is contained in the read area (See Figures 1 and 4 wherein the strip film holder 201a of holds a 35 mm film strip 200a containing six frames of images, and the film holder 201b holds a film strip 200b containing three frames of images. On the film holder 201a, six frame windows 203a corresponding to the six images of the film strip 200a are formed, and on the film holder 201b, three frame windows 203b corresponding to the three images of the film strip 203b are formed. *"In this embodiment, the film holder 201a holds a 35 mm film strip 200a containing six frames of images, and the film holder 201b holds a "brownie" type film strip 200b containing three frames of images. The film holders 201a and 201b have the same width and thickness so that either of them can be held by the rail member 105. Further, the length of the film holders 201a and 201b is substantially the same as the length of the table 101. On the film holder 201a, a slit 202a to which the film strip 200a is to be inserted extends through in the length (longitudinal)*



*direction thereof. Similarly, a slit 202b, to which the film strip 200b is to be inserted, extends through in the longitudinal direction of the film holder 201b. On the film holder 201a, six frame windows 203a corresponding to the six images of the film strip 200a are formed, and, on the film holder 201b, three frame windows 203b corresponding to the three images of the film strip 203b are formed. At the leading end portions of the film holders 201a and 201b, the film identifying openings 204a and 204b are formed, respectively. The film identifying openings 204a and 204b are used for identifying a folder (film strip) currently inserted, and therefore, the openings 204a and 204b are different.” column 4, lines 58-67 thru column 5 lines 1-8).*

Itano ‘201 and Kurosawa ‘324 are combinable because they are from the same field of endeavor of scanners (“*The present invention relates to a film scanner for scanning an image...*” Kurosawa ‘324 at column 1, lines 5-6).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the flatbed scanner as taught by Itano ‘201 by adding a strip film holder mechanism for holding the strip film in a longitudinal direction; a read area corresponding to frames the number of and length of which are half the number of and half the length of frames of one roll of strip film and can read a transparency; a second frame group having the other half of the frames of the strip film is contained in the read area as taught by Kurosawa ‘324. The motivation for doing so would have been to provide an improved film scanner where the scanning condition is automatically adjusted (“*It is therefore an object of the invention to provide an improved film scanner in which, when films to be scanned are exchanged, the scanning condition is automatically adjusted.*” Kurosawa ‘324 at column 2, lines 5-9). Therefore, it would have been obvious to combine Itano ‘201 with Kurosawa ‘324 to obtain the invention as specified in claim 7.

**Regarding claim 8;** Itano ‘201 discloses an image read controller for controlling a flatbed image reader (“*A flat bed scanning-type image reading apparatus has a slot for receiving the original holder 10. The slot is provided with a projection member functioning as restriction means, which is engageable with the guide grooves 16 and 18 so as to allow the original holder 10 to be inserted into the slot in either one of the two restricted directions. The*

*projection member interferes with the insertion of the original holder 10 into the slot in the directions other than the two restricted directions.” column 5, lines 34-42).*

can read a transparency (*“The flat bed scanner 100 further includes a projection member 120 formed in a slot 102 for receiving and engaging with the first and the second guide grooves 16 and 18 of the original holder 10, and a photo sensor 122 for optically reading discriminative information of the first discrimination aperture 24 or the second discrimination aperture 26 of the original holder 10.” column 6, lines 9-15).*

the image read controller comprising: a determination unit that determines whether or not an image of an identification hole exists as a position of an image of a film read by the image reader corresponding to a predetermined position in the read area (*“...a discrimination aperture reading unit 185 for activating the photo sensor 122 to read the number of through holes included in either the first discrimination aperture 24 or the second discrimination aperture 26 of the original holder 10.” column 7, lines 1-5);*

a preview unit that previews frames of the read film while changing the display order and the rotation direction of the frames changed in response to the determination result of the determination unit (*“The latter structure allows the original holder 510 to be inserted into the flat bed scanner 600 in the 180-degree direction and the 270-degree direction in addition to the 0-degree direction and the 90-degree direction. This structure gives an image of a desired direction with the higher degree of freedom. In this case, four sets of slits and sealing members are preferably formed symmetrically about a point by integral multiples of 90 degrees. This allows one photo sensor 622 to detect the light transmitting patterns of the four slits.” column 12, lines 58-67).*

Itano ‘201 does not disclose where the film is a strip film; a read area corresponding to frames the number of and length of which are half the number of and half the length of frames.

Kurosawa '324 discloses a strip film (*"In this embodiment, the film holder 201a holds a 35 mm film strip 200a containing six frames of images, and the film holder 201b holds a "brownie" type film strip 200b containing three frames of images."* column 4, lines 58-62). See also (*"On the film holder 201a, a slit 202a to which the film strip 200a is to be inserted extends through in the length (longitudinal) direction thereof."* column 4, lines 66-67 thru column 5, lines 1-2).

a read area corresponding to frames the number of and length of which are half the number of and half the length of frames (See Figures 1 and 4 wherein the strip film holder 201a of holds a 35 mm film strip 200a containing six frames of images, and the film holder 201b holds a film strip 200b containing three frames of images. On the film holder 201a, six frame windows 203a corresponding to the six images of the film strip 200a are formed, and on the film holder 201b, three frame windows 203b corresponding to the three images of the film strip 203b are formed. *"In this embodiment, the film holder 201a holds a 35 mm film strip 200a containing six frames of images, and the film holder 201b holds a "brownie" type film strip 200b containing three frames of images. The film holders 201a and 201b have the same width and thickness so that either of them can be held by the rail member 105. Further, the length of the film holders 201a and 201b is substantially the same as the length of the table 101. On the film holder 201a, a slit 202a to which the film strip 200a is to be inserted extends through in the length (longitudinal) direction thereof. Similarly, a slit 202b, to which the film strip 200b is to be inserted, extends through in the longitudinal direction of the film holder 201b. On the film holder 201a, six frame windows 203a corresponding to the six images of the film strip 200a are formed, and, on the film holder 201b, three frame windows 203b corresponding to the three images of the film strip 203b are formed. At the leading end portions of the film holders 201a and 201b, the film identifying openings 204a and 204b are formed, respectively. The film identifying openings 204a and 204b are used for identifying a folder (film strip) currently inserted, and therefore, the openings 204a and 204b are different."* column 4, lines 58-67 thru column 5 lines 1-8).

Itano '201 and Kurosawa '324 are combinable because they are from the same field of endeavor of scanners (*"The present invention relates to a film scanner for scanning images..."* Kurosawa '324 at column 1, lines 6-7).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the flatbed scanner as taught by Itano '201 by adding where the film is a strip film; a read area corresponding to frames the number of and length of which are half the number

of and half the length of frames as taught by Kurosawa '324. The motivation for doing so would have been to provide an improved film scanner where the scanning condition is automatically adjusted (*"It is therefore an object of the invention to provide an improved film scanner in which, when films to be scanned are exchanged, the scanning condition is automatically adjusted."* Kurosawa '324 at column 2, lines 5-9). Therefore, it would have been obvious to combine Itano '201 with Kurosawa '324 to obtain the invention as specified in claim 8.

**Regarding claim 9;** Itano '201 discloses an image read controller according to claim 8 wherein the preview unit previews the frames with the frames rotated 90 degrees in the read order or with the frames rotated -90 degrees in the order reverse to the read order in response to the determination result of the determination unit (*"The latter structure allows the original holder 510 to be inserted into the flat bed scanner 600 in the 180-degree direction and the 270-degree direction in addition to the 0-degree direction and the 90-degree direction. This structure gives an image of a desired direction with the higher degree of freedom. In this case, four sets of slits and sealing members are preferably formed symmetrically about a point by integral multiples of 90 degrees. This allows one photo sensor 622 to detect the light transmitting patterns of the four slits."* column 12, lines 58-67). 6,7,8

**Regarding claim 10;** Itano '201 discloses a recording medium storing a program for causing a computer to function as an image read controller for controlling a flatbed image reader (*"A flat bed scanning-type image reading apparatus has a slot for receiving the original holder 10. The slot is provided with a projection member functioning as restriction means, which is engageable with the guide grooves 16 and 18 so as to allow the original holder 10 to be inserted into the slot in either one of the two restricted directions. The projection member interferes with the insertion of the original holder 10 into the slot in the directions other than the two restricted directions."* column 5, lines 34-42).

can read a transparency (*"The flat bed scanner 100 further includes a projection member 120 formed in a slot 102 for receiving and engaging with the first and the second guide grooves 16 and 18 of the original holder 10, and a photo*

*sensor 122 for optically reading discriminative information of the first discrimination aperture 24 or the second discrimination aperture 26 of the original holder 10.* " column 6, lines 9-15);

the program causing the computer to function as: a determination unit that determines whether or not an image of an identification hole exists at a position of an image of the film read by the image reader corresponding to a predetermined position in the read area ("*...a discrimination aperture reading unit 185 for activating the photo sensor 122 to read the number of through holes included in either the first discrimination aperture 24 or the second discrimination aperture 26 of the original holder 10.*" column 7, lines 1-5);

a preview unit that previews the frames of the read strip film while changing the display order and the rotation direction of the frames changed in response to the determination result of the determination unit ("*The latter structure allows the original holder 510 to be inserted into the flat bed scanner 600 in the 180-degree direction and the 270-degree direction in addition to the 0-degree direction and the 90-degree direction. This structure gives an image of a desired direction with the higher degree of freedom. In this case, four sets of slits and sealing members are preferably formed symmetrically about a point by integral multiples of 90 degrees. This allows one photo sensor 622 to detect the light transmitting patterns of the four slits.*" column 12, lines 58-67).

Itano '201 does not disclose where the film is a strip film; a read area corresponding to frames the number of and length of which are half the number of frames of and half the length of one roll of strip film.

Kurosawa '324 discloses a strip film ("*The film 200 held by the film holder 201 is comprised of a film strip obtained by dividing a 35 mm film into lengths of, for example, six frames. The film holder 201 holding this film 200 is formed into a strip shape of dimensions somewhat larger than the film 200. At the substantial center in the thickness direction, a slot 202 for inserting the film 200 is formed over the entire length in the longitudinal direction.*" column 3, lines 38-42).

a read area corresponding to frames the number of and length of which are half the number of frames of and half the length of one roll of strip film (See Figures 1 and 4 wherein the strip film

holder 201a of holds a 35 mm film strip 200a containing six frames of images, and the film holder 201b holds a film strip 200b containing three frames of images. On the film holder 201a, six frame windows 203a corresponding to the six images of the film strip 200a are formed, and on the film holder 201b, three frame windows 203b corresponding to the three images of the film strip 203b are formed. *"In this embodiment, the film holder 201a holds a 35 mm film strip 200a containing six frames of images, and the film holder 201b holds a "brownie" type film strip 200b containing three frames of images. The film holders 201a and 201b have the same width and thickness so that either of them can be held by the rail member 105. Further, the length of the film holders 201a and 201b is substantially the same as the length of the table 101. On the film holder 201a, a slit 202a to which the film strip 200a is to be inserted extends through in the length (longitudinal) direction thereof. Similarly, a slit 202b, to which the film strip 200b is to be inserted, extends through in the longitudinal direction of the film holder 201b. On the film holder 201a, six frame windows 203a corresponding to the six images of the film strip 200a are formed, and, on the film holder 201b, three frame windows 203b corresponding to the three images of the film strip 203b are formed. At the leading end portions of the film holders 201a and 201b, the film identifying openings 204a and 204b are formed, respectively. The film identifying openings 204a and 204b are used for identifying a folder (film strip) currently inserted, and therefore, the openings 204a and 204b are different."* column 4, lines 58-67 thru column 5 lines 1-8).

Itano '201 and Kurosawa '324 are combinable because they are from the same field of endeavor of scanners (*"The present invention relates to a film scanner for scanning images..."* Kurosawa '324 at column 1, lines 6-7).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the flatbed scanner as taught by Itano '201 by adding where the film is a strip film; a read area corresponding to frames the number of which is half the number of frames of one roll of strip film as taught by Kurosawa '324. The motivation for doing so would have been to provide an improved film scanner where the scanning condition is automatically adjusted (*"It is therefore an object of the invention to provide an improved film scanner in which, when films to be scanned are exchanged, the scanning condition is automatically adjusted."* Kurosawa '324 at column 2, lines 5-9). Therefore, it would have been obvious to combine Itano '201 with Kurosawa '324 to obtain the invention as specified in claim 8.

5. **Claim 3 & 6** is rejected under 35 U.S.C. 103(a) as being unpatentable over Itano '201 and Kurosawa '324 as applied to claim 1 above, and further in view of Huang (US 7,106,480 hereinafter, Huang '480).

**Regarding claim 3;** The combination of Itano '201 and Kurosawa '324 discloses wherein the film holder mechanism is provided at a position where when a third corner at a diagonal position to the first corner of the film holder is matched with the first corner of the original bed or a fourth corner of the film holder which is opposite to the first corner in a lateral direction is matched with the second of the original bed (*"As illustrated in FIGS. 3 and 4, the original holder 10 includes a lower frame 12 and an upper frame 14, which are joined with each other to allow free opening and closing. The lower frame 12 and the upper frame 14 have inner openings 12W and 14W, respectively. The original holder 10 holds an original P in such a manner that the periphery of the original P is clamped between the lower frame 12 and the upper frame 14 and that the original P is observable through the openings 12W and 14W. The original P used herein is, for example, a 4".times.5" film."* column 5, lines 13-23). **See also** (*"As long as an original P is held at predetermined position and orientation by the original holder 904, the image obtained by the flat bed scanning-type image reading apparatus 900 always has the same directional property. When the top and bottom sides of the original P are located along the longitudinal sides of the original holder 904 as shown in FIG. 2(A), for example, the flat bed scanning-type image reading apparatus 900 gives an erecting image as displayed on a CRT 920. When the left and right sides of the original P are located along the longitudinal sides of the original holder 904 as shown in FIG. 2(B)."* column 1, lines 32-42). **Furthermore see** (*"One object of the present invention is thus to allow both a laterally long image and a vertically long image to be promptly displayed as an erecting image without any specific operations but only by inserting an original holder in an appropriate direction into an image reading apparatus."* Itano '201 at column 2, lines 33-37). Here, the original P of Itano '201 may be inserted into the flat bed scanner where the third and fourth corners of the original P may be matched with the third and fourth corners of the flat bed scanner 10.

Itano '201 and Kurosawa '324 does not expressly a slide film holder mechanism for holding slide film and where the slide film is contained in the read area.

Huang '480 discloses a slide film holder mechanism for holding slide film and where the slide film is contained in the read area (*"Refer to FIG. 5 which illustrates use of a media, for example a slide, where the film media is mounted in a housing. In this condition, the media holder 17 is positioned on top of the housing of the media. For this condition the relationship of the distances is given as  $F2-F4=F3$ . In this way, the media holder height can be correctly determined in order to provide proper focusing during scanning."* column 7, lines 53-60).

Itano '201 and Kurosawa '324 are combinable with Huang '480 because they are from the same field of endeavor of scanners (*"The present invention relates to a scanner..."* Huang '480 at column 1, line 6).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the scanner as taught by Itano '201 and Kurosawa '324 by adding a slide film holder mechanism for holding slide film and where the slide film is contained in the read area as taught by Huang '480. The motivation for doing so would have been to provide a scanner that proves high resolution and excellent quality scanned images while being easy to maintain (*"Thus the present invention proves high resolution and excellent quality scanned images while be easy to maintain."* Huang '480 at column 2, lines 8-10). Therefore, it would have been obvious to combine Itano '201 and Kurosawa '324 with Huang '480 to obtain the invention as specified in claim 1.

**Regarding claim 6;** Itano '201 discloses where the film holder mechanism is provided at a position where, when a third corner at a diagonal position to the first corner of the film holder is matched with the first corner of the original bed or a fourth corner on a side opposite to the first corner in the lateral direction is matched with the second corner of the original bed (*"As*



illustrated in FIGS. 3 and 4, the original holder 10 includes a lower frame 12 and an upper frame 14, which are joined with each other to allow free opening and closing. The lower frame 12 and the upper frame 14 have inner openings 12W and 14W, respectively. The original holder 10 holds an original P in such a manner that the periphery of the original P is clamped between the lower frame 12 and the upper frame 14 and that the original P is observable through the openings 12W and 14W. The original P used herein is, for example, a 4".times.5" film." column 5, lines 13-23). See also ("As long as an original P is held at predetermined position and orientation by the original holder 904, the image obtained by the flat bed scanning-type image reading apparatus 900 always has the same directional property. When the top and bottom sides of the original P are located along the longitudinal sides of the original holder 904 as shown in FIG. 2(A), for example, the flat bed scanning-type image reading apparatus 900 gives an erecting image as displayed on a CRT 920. When the left and right sides of the original P are located along the longitudinal sides of the original holder 904 as shown in FIG. 2(B)." column 1, lines 32-42). Furthermore see ("One object of the present invention is thus to allow both a laterally long image and a vertically long image to be promptly displayed as an erecting image without any specific operations but only by inserting an original holder in an appropriate direction into an image reading apparatus." Itano '201 at column 2, lines 33-37). Here, the original P of Itano '201 may be inserted into the flat bed scanner where the third and fourth corners of the original P may be matched with the third and fourth corners of the flat bed scanner 10.

a third guide part provided between the third and fourth corners of the film holder, and wherein the original bed includes a third guide indication part for indicating the frame of the film at position corresponding to the third guide part when the third corner of the film holder is matched with the first corner of the original bed or the fourth corner of the film holder is matched with the second corner of the original bed ("**First and second guide grooves 16 and 18** functioning as corresponding engagement means are formed on a rear face of the lower frame 12 of the original holder 10 as **clearly seen in FIG. 5.**" column 5, lines 28-31). See also ("The slot is provided with a projection member functioning as restriction means, which is engageable with the **guide grooves 16 and 18** so as to **allow the original holder 10 to be inserted into the slot in either one of the two restricted directions.** The projection member interferes with the insertion of the original holder 10 into the slot in the directions other than the two restricted directions." column 5, lines 35-39).

Itano '201 as modified does not expressly disclose a slide film holder mechanism for holding a slide film and where the slide film is contained in the read area.

Huang '480 discloses a slide film holder mechanism for holding a slide film and where the slide film is contained in the read area (*"Refer to FIG. 5 which illustrates use of a media, for example a slide, where the film media is mounted in a housing. In this condition, the media holder 17 is positioned on top of the housing of the media. For this condition the relationship of the distances is given as  $F2-F4=F3$ . In this way, the media holder height can be correctly determined in order to provide proper focusing during scanning."* column 7, lines 53-60).

Itano '201 and Kurosawa '324 are combinable with Huang '480 because they are from the same field of endeavor of scanners (*"The present invention relates to a scanner"* Huang '480 at column 1, line 6).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the scanner as taught by Itano '201 and Kurosawa '324 by adding a slide film holder mechanism for holding a slide film and where the slide film is contained in the read area as taught by Huang '480. The motivation for doing so would have been to provide a scanner that proves high resolution and excellent quality scanned images while being easy to maintain (*"Thus the present invention proves high resolution and excellent quality scanned images while be easy to maintain."* Huang '480 at column 2, lines 8-10). Therefore, it would have been obvious to combine Itano '201 and Kurosawa '324 with Huang '480 to obtain the invention as specified in claim 7.

#### **Examiner Notes**

6. The Examiner cites particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are

representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that, in preparing responses, the applicant fully considers the references in its entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or as disclosed by the Examiner.

**Conclusion**

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARCUS T. RILEY whose telephone number is (571)270-1581. The examiner can normally be reached on Monday - Friday, 7:30-5:00, est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on 571-272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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